

Software Load Instructions using the Console Port

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Management Interface Types

Luxcom's product will have one of the following three interface types. The product's manual describes how to access the interface.

- RS232 serial port
- USB
- Ethernet (OM200 only)

Terminal Emulation Program

If you are already using a terminal emulation program with X-modem support you may jump to *Software* section. Otherwise we suggest using the open source Tera Term which has X-modem, and may be downloaded for free here: <https://tssh2.osdn.jp/index.html.en>

Tera Term Serial Connection Setup

Start Tera Term

Start a **New Connection**

If the Luxcom modem is plugged in you will see the available COM port.

Select **Serial mode**

Select **Setup/Serial Port**

On *Setup/Serial Port* drop-down

Port: = COM?

Baud Rate: = 38400 or 115200 (see product manual)

Data: = 8 bit

Parity: = none

Stop: = 1

Flow control: = none

The interface assumes a dumb terminal, so almost any terminal type is usable, VT100 for example. Enter **Setup/Save Setup** so the next time you access Tera Term the settings will be correct.

At this point pressing enter on the keyboard will bring up the management menu.

Tera Term Ethernet Connection Setup for OM200

One thing that must be set up in the TERATERM.INI configuration file is to send out a character as soon as it is typed (the default is to send once the CR is entered). Start a TeraTerm session and go to **Setup/Save setup...**; this will show you where the TERATERM.INI file is stored. Edit this file with any text editor. Change it so *Line at a time mode EnableLineMode=off*.

Start Tera Term

Start a **New Connection**

Select/: TCP/IP

Host: OM200's IP

TCP port#: 10001

Service: Telnet

Protocol: UNSPEC

At this point pressing enter on the keyboard will bring up the management menu.

Note on uploading to the OM10K-8/24

When the USB cable is plugged into the OM10K, Windows™ will create two COM ports – the lower COM number connects to the MCU. The higher COM number connects to the processor. For console software uploads (.bit file) you need to access the lower COM number. The port needs to be set to 115200 baud, 8 bit, no parity.

When you hit return you should see :> *OM10K MAIN MENU*.

Software

The software file controls the operation of the micro-processor. The software is composed of two components, bootloader and application. The bootloader is only replaceable at the factory. The application component can be updated using the commands in the *Software upload menu*.

- Two copies of the application are stored - *PRIMARY* and *BACKUP*.
- The *PRIMARY* software file is automatically installed at power up (or when *reprogrammed*);
- The *BACKUP* file is loaded if the *PRIMARY* is missing or fails to load.
- The *PRIMARY* and *BACKUP* files can have different software with different functionality.
- Version information can be viewed with the *Software upload /Show stored files* command.
- Software files have a .b08 or .bin extension.

The following is an example of the *Software upload menu*

- 1 Show stored files
- 2 Upload new BACKUP
- 3 Swap BACKUP and PRIMARY
- 4 Reprogram card with PRIMARY

Firmware

The firmware file controls the operation of the Programmable Gate Array if the product has one. The firmware file is updated using the commands in the *Firmware upload menu*.

The update procedure is the same as the *Uploading New Software* procedure.

The firmware file will have a .bit extension.

Uploading New Firmware or Software

1. First, decide whether you want to replace the *BACKUP* or *PRIMARY* file using the *Show stored files* command. If you want to replace the *PRIMARY* file, use the *Swap BACKUP and PRIMARY* command.
2. Second, execute the *Upload new BACKUP* command. You will have to enter the management password (factory set to *luxcom*) at this point. You must start the upload within 60 seconds. If the upload seems to be stalled, restart the upload.

To select the file, use TeraTerm's *File/Transfer/X-modem...* command. TeraTerm then presents a dialog box that allows the user to select the file and protocol.

If the file upload fails, the *BACKUP* file will be empty and any previous file in this location will be lost.

3. Once the file is uploaded, use the *Swap BACKUP and PRIMARY* command.
4. Now use the *Reprogram card with PRIMARY* command (or power cycle the chassis).
5. If the modem's functionality is satisfactory, upload the same file into the *BACKUP*.
6. Updating is now completed.